

REMARKS

In response to the Examiner's Office Action, Paper No./Mail Date 20090108, dated January 28, 2008, Applicant has carefully studied the references cited by the Examiner and the Examiner's comments relative thereto.

Claims 1-9, 22, 26, 38, and 40-44 have been amended.

Claims 11-21, 23-25, and 27-37 have been cancelled.

Claims 45-60 have been added.

Claims 1-10, 22, 26, and 38-60 remain in the application.

No new matter has been added.

Reconsideration of the application, as amended, is respectfully requested.

35 U.S.C. § 112

The Examiner rejected Claims 27-44 under 35 U.S.C. § 112, first paragraph, as based on a disclosure which is not enabling. The Examiner stated, "[t]he foam cells containing a blowing agent is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure."

Independent Claim 38, as amended, claim a foamed outer layer of plastic wherein foam cells formed in the outer layer contain a gas. Independent Claim 27 and Claims 28-37 which depend therefrom have been cancelled from the application. The remaining rejected claims depend, either directly or indirectly, from 38 and contain at least the same limitations thereof. Accordingly, the Examiner's rejection of Claims 27-44 is now moot and should be withdrawn.

The Examiner rejected Claims 16, 17, 32, 34, and 35 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 16, 17, 32, 34 and 35 have been cancelled from the application. Accordingly, the Examiner's rejection of these claims is now moot.

35 U.S.C. § 102(b)

The Examiner rejected Claims 1, 2, 5, 8-10, 12, 13, 18, 19, 22, 26-29, 33, and 35-37 as being anticipated under 35 U.S.C. § 102(b) by WO 98/16364 to Clarke for METHOD OF INJECTION MOULDING A FOAMED ARTICLE. Corresponding U.S. Patent No.

6,358,446 to Clarke was relied on by the Examiner for convenience. Because Claims 12, 13, 18, 19, 27-29, 33, 36, and 37 have been canceled from the application, the Examiner's rejection of these claims is now moot.

The Examiner stated, "Clarke teaches a blow molded bottle comprising three layers: an inner non-foamed layer, an intermediate foam layer, and an outer non-foamed layer."

Claim 1 of the application, as amended, reads as follows:

A blow molded container, comprising:
an inner layer of plastic suitable for blow molding;
an outer layer of plastic suitable for blow molding contacting said inner layer, said outer layer of plastic formed as a foam wherein the foam cells contain one of carbon dioxide and nitrogen; and
a threaded portion formed at an end of the container adapted to receive a cooperating closure.

Claims 1, as amended, recites a blow-molded container having "an inner layer of plastic" and an "outer layer of plastic formed as a foam". The preform and bottle of Clarke have an outer non-foamed layer, as acknowledged by the Examiner (See column 11, lines 45-65; and column 12, lines 25-50). In fact, the method of Clarke requires that the outer layer be non-foamed because "a skin is allowed to form" before a sleeve is withdrawn to cause the foaming of the material (See column 11, line 46). As a result, the Clarke reference cannot properly serve as a basis for rejection of amended independent Claim 1 or Claims 2, 5, and 8-10, which depend therefrom, under 35 U.S.C. § 102(b).

Because independent Claims 22 and 26 contain at least the same limitations as Claim 1, the Clarke reference cannot properly serve as a basis for rejection thereof.

The Examiner also rejected Claims 38-40 and 42-44 as being anticipated under 35 U.S.C. § 102(b) or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Clarke. Claim 38, as amended, recites a preform having "an inner layer of plastic" and an "outer layer of plastic formed as a foam". As discussed above, the preform and bottle of Clarke have an outer non-foamed layer, as acknowledged by the Examiner (See column 11, lines 45-65; and column 12, lines 25-50). In fact, the method of Clarke requires that the outer layer be non-foamed because "a skin is allowed to form" before a sleeve is withdrawn to cause the foaming of the material (See column 11, line 46). As a result, the Clarke reference cannot properly serve as a basis for rejection of amended independent Claim 38 or Claims 39, 40, and 42-44, which depend directly therefrom, under 35 U.S.C. § 102(b) or 35 U.S.C. § 103(a).

Lastly, the Examiner rejected Claims 1-5, 8-10, 12, 13, 18, 22, 24, 26-29, 33, 35-40, and 42-44 as anticipated by or, in the alternative, obvious over U.S. Patent No. 4,872,573 for PLASTIC CLOSURE WITH BARRIER COATING to Johnson et al. Because Claims 12, 13, 18, 24, 27-29, 33, and 35-37 have been cancelled from the application, the Examiner's rejection of these claims is now moot.

Claims 1, as amended, recites a blow-molded container having "an inner layer of plastic" and an "outer layer of plastic formed as a foam". The closure of Johnson has an outer non-foamed layer, as acknowledged by the Examiner (See column 3, lines 45-65). A thorough review of the Johnson referenced shows that it is devoid of any mention of a multilayered container or preform having an outer foamed layer. As a result, the Johnson reference cannot properly serve as a basis for rejection of independent Claim 1, as amended, or Claims 2-5 and 8-10, which depend therefrom, under 35 U.S.C. § 102(b).

Because independent Claims 22, 26, and 38 contain at least the same limitations as Claim 1, the Johnson reference cannot properly serve as a basis for rejection thereof. Accordingly, Claim 24, which depends directly from Claim 22, and Claims 39, 40, and 42-44, which depend from Claim 38 are also allowable over Johnson.

35 U.S.C. § 103(a)

The Examiner rejected Claims 3, 4, 6, 7, 14, 15, 20, 21, 24, 30, 31, and 41 as obvious over Clarke in view U.S. Patent No. 6,485,819 for ALIPHATIC-AROMATIC COPOLYESTERS to Hayes under 35 U.S.C. § 103(a). Because Claims 14, 15, 20, 21, 24, 30, and 31 have been canceled from the application, the Examiner's rejection of these claims is now moot. Applicant respectfully asserts that the Examiner has failed to establish a prima facie case of obviousness in regards to Claims 3, 4, 6, 7, and 41 because the cited references do not contain any motivation or suggestion to combine references.

Dependent Claims 3, 4, 6, and 7 contain at least the same limitations as amended independent Claim 1, as amended, namely, a blow molded container having "an inner layer of plastic" and an "outer layer of plastic formed as a foam". Dependent Claim 41 contains at least the same limitations as independent Claim 38, as amended, namely, a preform having "an inner layer of plastic" and an "outer layer of plastic formed as a foam".

A thorough examination of Hayes shows it is completely devoid of any disclosure regarding multilayer objects, such as a bottle and a preform, comprised of identical materials. Therefore, Hayes does not cure the defects of Clarke, namely, neither Clarke nor Hayes discloses a blow molded container or a preform having “an inner layer of plastic” and an “outer layer of plastic formed as a foam”.

Accordingly, the combination of Clarke and Hayes does not produce each and every limitation of independent Claims 1 and 38, as amended. As a result, no combination of references can properly serve as a basis for rejection of independent Claim 1 or Claims 3, 4, 6, and 7 which depend therefrom, and independent Claim 38 or Claim 41 which depends therefrom, under 35 U.S.C. § 103(a).

The Examiner also rejected Claims 18-21, 24, 27-31, 33, and 36-42 as obvious over Clarke in view of U.S. Patent No. 4,923,723 for MULTI-LAYER PREFORM, METHOD OF FORMING PREFORM, AND CONTAINER FORMED FROM THE PREFORM to Collette et al. under 35 U.S.C. § 103(a). Because Claims 18-21, 24, 27-31, 33, 36, and 37 have been canceled from the application, the Examiner’s rejection of these claims is now moot. Applicant respectfully asserts that the Examiner has failed to establish a prima facie case of obviousness in regards to Claims 38-42 because the cited references do not contain any motivation or suggestion to combine references.

Dependent Claims 39-42 contain at least the same limitations as independent Claim 38, as amended, namely, a preform having “an inner layer of plastic” and an “outer layer of plastic formed as a foam”.

A thorough examination of Collette shows it is completely devoid of any disclosure regarding multilayer objects, such as a bottle and a preform, having an outer foamed layer and an inner nonfoamed layer. In fact, Collette is devoid of any disclosure regarding foam whatsoever. Therefore, Collette does not cure the defects of Clarke, namely, neither Clarke nor Collette discloses a preform having “an inner layer of plastic” and an “outer layer of plastic formed as a foam”. Accordingly, the combination of Clarke and Collette does not produce each and every limitation of independent Claim 38, as amended. As a result, no combination of references can properly serve as a basis for rejection of independent Claim 38 or Claims 39-42 which depend therefrom, under 35 U.S.C. § 103(a).

Lastly, the Examiner rejected Claims 32 and 34 as obvious over Clarke in view of Hayes in further view of Collette. Because Claims 32 and 34 have been canceled from the application, the Examiner’s rejection of these claims is now moot.

Accordingly, withdrawal of the rejections under 35 U.S.C. § 103(a) is respectfully requested.

Added Claims

Claims 45 and 46 depend directly from Claim 1, and Claims 47 and 48 depend directly from Claim 22. As discussed above, because Claims 45, 46, 47, and 48 contain at least the same limitations as the independent claims from which they depend, no combination of Clarke, Hayes, Collette, or Johnson discloses each and every limitation of the claims. As a result, no reference or combination of references can properly serve as basis for rejection of Claims 45-48 under 35 U.S.C. §102(b) or 35 U.S.C. §103(a).

New Claim 49 of the application recites:

A blow molded container, comprising:
a first layer of plastic suitable for blow molding;
a second layer of plastic suitable for blow molding contacting said first layer, said second layer of plastic formed as a foam wherein the foam cells contain one of carbon dioxide and nitrogen;
a third layer of plastic suitable for blow molding contacting said second layer; and
a fourth layer of plastic suitable for blow molding contacting one of said first layer and said third layer; and
a threaded portion formed at an end of the container adapted to receive a cooperating closure.

New Claim 52 of the application recites:

A multilayer preform for forming a blow molded container, comprising:
a first layer plastic suitable for blow molding;
a second layer of plastic suitable for blow molding contacting said first layer, said second layer of plastic formed as a foam wherein the foam cells contain one of carbon dioxide and nitrogen;
a third layer of plastic suitable for blow molding contacting said second layer; and
a fourth layer of plastic suitable for blow molding contacting one of said first layer and said third layer; and
a threaded portion formed at an end of the preform adapted to receive a cooperating closure.

Claim 49 recites a container having a first layer of plastic, a second layer of plastic formed as a foam, a third layer of plastic contacting the first layer, and a fourth layer of plastic contacting one of the first layer and the third layer. Claim 52 recites a preform having a first

layer of plastic, a second layer of plastic formed as a foam, a third layer of plastic contacting the first layer, and a fourth layer of plastic contacting one of the first layer and the third layer. As disclosed in the present application, the container and preform may include any number of foamed and nonfoamed layers, as desired. Neither Clarke, Hayes, Collette, nor Johnson relied on by the Examiner discloses a container or preform having at least four layers, one of which is a foamed layer. Accordingly, none of the cited references anticipate the Applicant's invention. As a result, none of the references can properly serve as a basis for rejection of independent Claims 49 and 52 or Claims 50-51 and 53-54, which depend therefrom, respectively, under 35 § U.S.C. 102, and Claims 49-54 are allowable.

Furthermore, because none of the references disclose a first layer of plastic, a second layer of plastic formed as a foam, a third layer of plastic contacting the first layer, and a fourth layer of plastic contacting one of the first layer and the third layer, even if there were a motivation or suggestion to combine the references, no combination will produce the limitation. As a result, no combination of references can properly serve as a basis for rejection of independent Claims 49 and 52 nor any of the dependent claims under 35 U.S.C. § 103(a).

Claims 55-60 contain at least the same limitations as Claims 49 and 52, as discussed above. As a result, none of the references can properly serve as a basis for rejection of Claims 55-60 under 35 § U.S.C. 102. Additionally, for the reasons discussed above for Claims 49 and 52, no combination of references can properly serve as a basis for rejection of independent Claims 55-60 under 35 U.S.C. § 103(a).

Double Patenting

The Examiner has provisionally rejected Claims 1-10, 12-22, 24, and 26-44 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-26 of copending Patent Application Ser. No. 11/384,979. The Examiner noted that, "[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '979 patent application fully encompass the claimed subject matter."

Because Claims 11-21, 24, 36, and 37 have been cancelled from the application, the Examiner's rejection of these claims is now moot. Furthermore, Claims 1-10, 22, 26-35, and 38-44 have been amended or depend from amended claims, and Applicant believes the claims

of the application are allowable over the art of record. Accordingly, the Double Patenting rejection is the only remaining rejection of the Examiner.

the Applicant requests that the Double Patenting rejection be withdrawn. Pursuant to MPEP 804(I)(A)(1), because the “provisional” nonstatutory obviousness-type double patenting (ODP) rejection is the only rejection remaining in the present application (the earlier filed of the two pending applications), and the later-filed application is rejectable on other grounds, the Examiner is requested to withdraw the rejection and permit the earlier-filed application to issue as a patent without a terminal disclaimer. The Applicant believes the Double Patenting rejection is improper and reserves the right to traverse the rejection at a later date, if necessary.

The other references cited by the Examiner, but not applied, have been studied and are not considered to be any more pertinent than the references relied upon by the Examiner.

It is submitted that the claims distinctly define the Applicant’s invention and distinguish the same from the prior art. Reconsideration of the application, as amended, is respectfully requested. A formal Notice of Allowance is solicited.

While the Applicant’s attorney has made a sincere effort to properly define Applicant’s invention and to distinguish the same from the prior art, should the Examiner deem that other language would be more appropriate, it is requested that a telephone interview be had with the Applicant’s attorney in a sincere effort to expedite the prosecution of the application.